

REMARKS

Claims 1-31 were presented for examination in the present application. The instant amendment adds new claims 32-35. Thus, claims 1-37 are pending upon entry of the instant amendment, which is respectfully requested. Claim 15 has been allowed.

Claims 1-14 and 16-31 were rejected under 35 U.S.C. §112, second paragraph.

In the interest of expediting prosecution, the claims have been amended to remove the rejected "like" terminology and claims 32-35 have been added to point out various embodiments of the claimed "disk member". Support for new claims 32-35 can be found in the specification at least at page 4, lines 24 to 26.

In addition, claim 16 has been amended to make explicit what had been implicit in the claims, namely to correlate the arms and transporters to one another.

Applicants respectfully submit that these amendments obviate the rejections. Accordingly, reconsideration and withdrawal of the rejections to the claims under section 112 are respectfully requested.

Claims 16 through 19 were not rejected by the Office Action under any of the cited art and, thus, are believed to be in condition for allowance as they depend from allowed claim 15.

In addition, claim 30 was not rejected over any cited art and, thus, is believed to contain allowable subject matter.

Claims 1-7, 9-12, and 14 were rejected under 35 U.S.C. §103 over U.S. Patent No. 6,074,163 to Yamazaki et al. (Yamazaki) in view of U.S. Patent No. 3,401,974 to Martelee (Martelee). Claim 8 was rejected under 35 U.S.C. §103 over Yamazaki and Martelee in further view of U.S. Patent No. 4,968,077 to Redmon et al. (Redmon).

Claim 13 was rejected under 35 U.S.C. §103 over Yamazaki and Martelee in further view of U.S. Patent No. 4,451,197 to Lange (Lange).

Independent claim 1 has been amended to clarify that the driving-mechanism is "adapted to provide a first movement and a second movement to said at least two tong arms following the topography of a cam structure". Support for this amendment can be found in the specification at least at page 13, line 2.

Yamazaki discloses scooping blocks (4) that are disposed in an opposed relation in the vicinity of outer peripheral edges (1a) on the longer sides of the plate (1), and a gas injection mechanism (11) for injecting a pressurized gas is provided next to the scooping block (4). After the edges of the plate (1) are floated by injecting the pressurized gas from the gas injection mechanism (11) to the outer peripheral edges (1a) of the plate (1) through pipes (12), the scooping blocks (4) are inserted under the plate (1). Thereafter, the scooping blocks (4) are moved upward, by which the plate (1) is removed from the support plate (2). See Abstract. Clearly, the scooping blocks of Yamazaki do not disclose or suggest the cam structure recited in claim 1.

Martelee discloses tongs for handling heavy products. The gripping jaws are articulated to scissors-wise crossed arms which are articulated to the piston rod of a principal hydraulic jack and to a collar which is slidable and rotatable on said jack which is connected to a first pressure gas accumulator, the closing and opening of said arms being effected by an auxiliary jack the feed of which is controlled by a first electro-valve and comes from a second pressure gas accumulator which is also connected to said principal jack and possibly to a rotating jack via a second electro-valve which is telecontrolled by radio-electric signals. Clearly, the tongs of Martelee also do not disclose or suggest the cam structure of claim 1.

Therefore, the proposed combination of Martelee and Yamazaki does not disclose or suggest claim 1.

Redmon is merely asserted as disclosing contour and a groove on the gripper. Lange is merely asserted as disclosing a sensor on a pick-up. Thus, Redmon and Lange, alone or in combination with Martelee and Yamazaki, also do not disclose or suggest the cam structure now recited by claim 1.

Claim 1 is therefore believed to be in condition for allowance. Claims 2 through 14 and 32 are also believed to be in condition for allowance for at least the reason that they depend from the aforementioned claim 1. Reconsideration and withdrawal of the rejections to claims 1 through 14 are respectfully requested.

Claims 20-24, 26-29, and 31 were rejected under 35 U.S.C. §103 over U.S. Patent No. 6,039,375 to Bauman et al. (Bauman) in view of Yamazaki. Claim 25 was rejected under 35 U.S.C. §103 over Bauman and Yamazaki in further view Redmon. Claim 13 was rejected under 35 U.S.C. §103 over Yamazaki and Martelee in further view of U.S. Patent No. 4,451,197 to Lange (Lange).

Independent claim 20 now recites that the at least two tong arms are “adapted to be front-loaded or back loaded with the disk member”. Support for this feature is found in the specification at least at page 6, lines 21-29.

Bauman discloses a gripper assembly with an integrated heat shield. The integrated heat shield is in the form of a shell having one or more openings through which a gas may flow into and out of in order to create a cooling current flow. Two axially aligned and opposed cylinders, each having a main portion, are individually mounted to the shell and the shell substantially surrounds the main portion of each cylinder. Each cylinder has a piston, and each piston has a piston rod. Each piston rod is coupled to a jaw and each jaw is supported by one or more guide rods slidably received in one or more sleeves mounted to the shell. The jaws are positioned substantially parallel to one another and operable to grasp and release objects of interest. Motion of the jaws is synchronized by a synchronization mechanism.

However, Applicants respectfully submit that the jaws of Bauman do not disclose or suggest the at least two tong arms of amended claim 20.

Thus, Applicants respectfully submit that Bauman, alone or in combination Yamazaki, Lange, and/or Redmon do not disclose or suggest the amended claim 20. Claim 20, as well as claims 21 through 31 that depend therefrom, are therefore believed to be in condition for allowance.

In view of the above, it is respectfully submitted that the present application is in condition for allowance. Such action is solicited.

In the alternative, it is believed that the instant amendment places the present application in better condition for appeal. Accordingly, entry and consideration of the instant amendment at least for the purposes of appeal are respectfully requested.

If for any reason the Examiner feels that consultation with Applicants' attorney would be helpful in the advancement of the prosecution, the Examiner is invited to call the telephone number below.

Respectfully submitted,



Charles N. J. Ruggiero
Reg. No. 28,468
Attorney for Applicant(s)
Ohlandt, Greeley, Ruggiero & Perle, L.L.P.
One Landmark Square, 10th floor
Stamford, CT 06901-2682
Tel: (203) 327-4500
Fax: (203) 327-6401

July 25, 2006